<b>DAY 1:</b>	Monday, December 4, 2006	<b>DAY 2:</b>	Tuesday, December 5, 2006		N #5: SUSTAINABLE FISH CULTURE
9:00	Registration			\$	Session Chair: Julie Collins, USFWS
1:00	Welcome/Announcements: Doug Olson, USFWS	8:00	Announcements: Craig Martin, USFWS		
1:10	Keynote Speakers: Renne Lohoefener, USFWS Regional Director - Region 1 and Dan Diggs, USFWS	8:05	Raffle Drawing*	1:10	Lee Blankenship, Northwest Marine Technology, Hatchery Reform in the Pacific Northwest.
	Assistant Regional Director – Region 1 Fisheries	SESSI	ON #3: HATCHERY OPS & NEW TECH	1:30	Douglas DeHart, U.S. Fish and Wildlife Service,
SESSI	ION #1: FISH HEALTH & NUTRITION	S	ession Chair: Travis Collier, USFWS		Pacific Region, U.S. Fish and Wildlife Service
S	ession Chair: Ann Gannam, USFWS	2	081011 0114111 114111 0011101, 081 118		Columbia Basin Hatchery Reviews.
		8:10	Randall L. Winters, Bonneville Fish Hatchery, Oregon	1:50	William J. Bosch, Yakama Nation Fisheries – Yakima
1:30	Jacob Gregg, USGS – Biological Research Discipline,	0.10	Department of Fish and Wildlife, Overview of Salmon		Klickitat Fisheries Project Evaluating the use of Kelt
	Specific Pathogen Free Marine Fish: Developing Tools		Production at Bonneville Fish Hatchery.		Reconditioning to Rebuild Steelhead Populations in the
	for Epizootiology.	8:30	<b>Loren C. Jensen</b> , Bonneville Fish Hatchery, Oregon		Yakima River, Washington.
1:50	Doug Munson, Idaho Department of Fish and Game,	0.00	Department of Fish and Wildlife, Safe and Humane	2:10	Greg Taylor, U.S. Army Corps of Engineers,
	Benefits of Hatchery Management of BKD Using		Harvest of Adult Salmon Brood Fish Returning to		Evaluating the Success of Outplanting Adult Spring
• 10	ELISA-based Culling.		Bonneville Fish Hatchery.		Chinook Salmon (Oncorhynchus tshawytscha) in the
2:10	Colleen Weiss, Oregon Department of Fish and	8:50	Ryan Couture, Oregon Department of Fish and		North Fork of the Middle Fork Willamette River,
	Wildlife, Fish Tissue Collection Techniques and Basic		Wildlife, Oregon Hatchery Research Center, <i>Oregon</i>		Oregon.
• • •	Information on Routine Fish Health Examinations.		Hatchery Research Center – Facility Overview.	2:30	Steven Roberts, Washington Department of Fish and
2:30	Craig Banner, ODFW Fish Health, Oregon State	9:10	Caroline Peterschmidt, Makah Fisheries Management,		Wildlife, The Last Spawning: Completion of the
	University, Initial Results from ODFW's Fish Health		Where the Research Meets the Road- Field Experiences		Hatchery Phase of Tucannon River Spring Chinook
• •	Survey of Naturally Produced Fish.		and Results of a Calcein Marking Trial with Lake		Captive Broodstock Program.
2:50	Dr. John E. Halver, Professor Emeritus in Nutrition,		Ozette Sockeye.		
	School of Aquatic Fishery Science, University of	9:30	Genny West, PR Aqua, Reusing Raceway and	2:50 - 3:20	Afternoon Break / Raffle Drawing* (3:15)
	Washington, How Selenium and Ascorbate in Diet		Circular Tank Water.		
2.10.2.20	Intake Affect Fish Health.			SESSI	ON #6: SUSTAINABLE FISH CULTURE
3:10-3:30	Afternoon Break / Raffle Drawing * (3:25)			9	Session Chair: Jim Bowker, USFWS
SESSI	ION #2: FISH HEALTH & NUTRITION	9:50-10:20	Morning Break / Raffle Drawing* (10:15)	•	
$\mathbf{S}$	ession Chair: Ray Brunson, USFWS			3:20	Carlin McAuley, NOAA Fisheries, Captive Broodstock
2.20	D' D LO D ( CE'L LWELLE	SESSI	ON #4: HATCHERY OPS & NEW TECH		Programs for Endangered Snake River Spring Chinook
3:30	Diane Deal, Oregon Department of Fish and Wildlife,		Session Chair: Larry Telles, USFWS		– Life in a 20' Ocean – The Manchester Experience.
2.50	Ultraviolet Systems – Uses and Advantages.		session Chair. Larry Tenes, OSF WS	3:40	Timothy L. Hoffnagle, Oregon Department of Fish and
3:50	Gerald Jones and John Kaufman, ODFW Fish	10.20	Debout C. Endicatt NOAA Eighaniag Nauthyvast		Wildlife, Northeast Region Fish Research, <i>The Grande</i>
	Health, IHNV at Cole M. Rivers Hatchery, Rogue River	10:20	<b>Robert C. Endicott,</b> NOAA Fisheries, Northwest Fisheries Science Center, <i>A New Temperature-based</i>		Ronde Basin Chinook Salmon Captive Broodstock: F <sub>1</sub>
4.10	Basin, Oregon.		Growth Program to Improve Feeding Strategies at		Generation.
4:10	S.K. Gutenberger, U.S. Fish and Wildlife Service,		Hatcheries: a Freeware Application Compiled in Visual	4:00	Travis Anderson, U.S. Fish and Wildlife Service,
	Lower Columbia River Fish Health Center. <i>Use of</i>		Basic.		Lahontan NFH, The Development of the Pilot Peak
	Salmonid Carcasses for Nutrient Restoration: Disease Concerns and Treatments to Reduce Pathogen	10:40	Theresa Godin, Freshwater Fisheries Society of BC,		Strain of Lahontan Cutthroat Trout at Lahontan
	Transmission.	10.40	Sterile and All-Female Kokanee Development for		National Fish Hatchery.
4:30	<b>Darlene Snyder</b> , Idaho Department of Fish and Game,		Recreational Fisheries.	4:20	Ray Jones, U.S. Fish and Wildlife Service, Idaho
4.30	Hydrogen Peroxide Increases Survival of Rainbow	11:00	<b>Dan Magneson,</b> U.S. Fish and Wildlife Service,		Fishery Resource Office, Evaluation of Clearwater
	Trout Fry at Hagerman State Fish Hatchery.	11.00	Willard National Fish Hatchery, <i>Use of Shade</i>		Steelhead Stock Performance in Serial Re-use Raceways
4:50	Dr. Jim Brackett, Western Chemical Inc., Applications		Structures at Willard National Fish Hatchery.		at Hagerman National Fish Hatchery.
4.30	of 35% PEROX-AID® as an External Microbicide for	11:20	Harry Heise, Specialty Coating Solutions, <i>The</i>	4:40	Cory Kamphaus, Yakama Nation, Fisheries Resource
		11.20	Rehabilitation and Coating of the Walhalla Fish		Management, Use of Natural and Semi-Natural Juvenile
5:10	Freshwater Fish.  James D. Bowker, U.S. Fish and Wildlife Service,		Hatchery Twenty –Four (24) Concrete Raceways.		Rearing Ponds and Applicability to Mid-Columbia
3.10	Impending Approval of Aquaflor® for Salmonids – A	11:40	Benedikt Hálfdanarson, Vaki Aquaculture Systems		Coho Reintroduction.
	New Veterinary Feed Directive Antibiotic.	11TU	Ltd, Identifying Fish Sex and Species With Riverwatcher	5:00	Geraldine Vander Haegen, Northwest Marine
	ivew veletimary reed Directive Antibiotic.		Camera Fish Counter.		Technology, Inc. Coded Wire Tags and Pacific Salmon
5:30	Announcements/Adjourn (Raffle Drawing *)		Camera I was Commer.		Hatcheries.
5:30-10:00	Trade Show and Poster Session Social (light food &	12:00 - 1:10	Lunch / Raffle Drawing* (1:05)		
	refreshments)	12.00 - 1.10	Danon / Marine Diawing (1.00)	5:20	Announcements/Adjourn (Raffle Drawing*)

#### DAY 3: Wednesday, December 6, 2006

8:00 Announcements: Amy Gaskill, USFWS

8:05 Raffle Drawing\*

### SESSION #7: AQUATIC NUISANCE SPECIES AND HACCP

#### Session Chair: Paul Heimowitz, USFWS

8:10	John W. Hitron, U.S. Fish and Wildlife Service Carson NFH, Eastern Brook Trout in Tyee Spring
	Creek – Water Supply for Carson National Fish
	Hatchery.
8:30	<b>Leyla Arsan,</b> Oregon State University, <i>Potential</i>
	Dispersal of the Non-native Myxobolus cerebalis. A
	Qualitative Analysis of Risk for the Willamette River
	Basin, Oregon.
8:50	Jordan Nielson, University of Idaho, USGS
	Cooperative Fish and Wildlife Research Unit, Progress
	on Methods of Controlling New Zealand Mudsnails
	(Potamopyrgus antipodarum) in Fish Hatcheries.
9:10	Paul Heimowitz, U.S. Fish and Wildlife Service,
	Aquatic Invasive Species and Research, What's the
	(Critical Control) Point of HACCP: Minimizing the
	Spread of Aquatic Invasive Species.
9:30	ANS Panel Discussion, John Hitron, Leyla Arsan,
	Jordan Nielson, & Paul Heimowitz, Aquatic Nuisance
	Species and HACCP related to Fish Culture.
9:50 - 10:20	Morning Break / Raffle Drawing* (10:15)
7.50 10.20	Monning Break / Runne Brawing (10.13)

#### SESSION #8 SUSTAINABLE FISH CULTURE cont. Session Chair: Matt Cooper, USFWS

10:20	Fish Culture Hall of Fame Inductions
10:40	Stephen Smith, SHS Fisheries Consulting, Chief
	Joseph Hatchery, Approaching Final Design.
11:00	Caine Brand, Chiwawa Ponds/Lake Wenatchee Net
	Pens, Supplementing For Sustainable Future- Chiwawa
	Ponds/Lake Wenatchee Net Pens.
11:20	Robert E. Null, U.S. Fish and Wildlife Service, Post-
	spawn Movement and Iteroparity of Hatchery-Origin
	Steelhead Kelts in the Central Valley of California.
11:40	Nathan Wiese, U.S. Fish and Wildlife Service,
	Hagerman NFH, Production Capacity Assessment of
	Steelhead at Hagerman National Fish Hatchery.
12:00	Closing Remarks / Adjourn / Grand Prize Drawing*

<sup>\*</sup>Must be present to win at Raffle Drawings!

## WE WOULD LIKE TO THANK THE FOLLOWING FOR THEIR GENEROUS RAFFLE DONATIONS:

Full Sail Brewing Co Hood River,	River Quest Excursions - Lewiston,
OR	ID
DoubleTree Hotel, Lloyd Center	Leavenworth NFH
Leatherman Tools Inc.	Columbia Sportswear
Jim Minnick Custom Knives –	Paul Kaiser Wood Crafts - Quilcene,
Kamiah, ID	WA
Buck Knives - Post Falls, ID	Sportsman's Warehouse
Idaho Ducks Unlimited, Inc.	Fish Brewing Co Olympia, WA
Best Western/Lodge at Rivers Edge	Guide Shop/Clearwater Drifters -
- Orofino, ID	Orofino, ID
Design Impressions - Boise, ID	Wet Planet - White Salmon, WA
Ichy Prints', P. Groves - Boise, ID	Multnomah Falls Lodge
Red Lion Inn - Lewiston, ID	Tri-State Outfitters, ID/OR/WA
Zoller's Outdoor Odyssey – White	Black Sheep Sporting Goods -
Salmon, WA	Lewiston, ID
Skamania Lodge, Hood River	Skokomish Tribe - WA
Friends of NW Hatcheries, Inc	Pacific Seafood International
PCO Maritime Charters, Ltd WA	Young's Columbia Distributing
Hip Chicks Do Wine - Portland, OR	Kathryn Kostow, FCC logo artist
Mystery Ranch – Bozeman, MT	Simms Fishing – Bozeman, MT
Hagerman NFH - staff	G.I. Joe's – Portland, OR
	Franz Family Bakeries, Portland
Susan Gutenberger / Patrick	Wildhorse Resort and Casino -
Connolly – Underwood, WA	Pendelton, OR

## WE WOULD LIKE TO THANK THE FOLLOWING PEOPLE FOR ALL THEIR HELP:

Doug Olson	Brett Galyean	Craig Martin
Amy Gaskill	Margaret Anderson	Tyler Marriott
Mark Olson	Nathan Wiese	Mark Ahrens
Susan Sawyer	Ann Gannam	Ray Brunson
Larry Telles	Julie Collins	Jim Bowker
Paul Heimowitz	Melissa Kennedy	RZ Smith
Cheri Anderson	Meagan Johnson	Matt Cooper
Travis Collier	Niccole Wandelear	Molly Bowman
A 1 11 /1 /1		

And all the many others...



# 57<sup>th</sup> Annual Northwest Fish Culture Conference

DECEMBER 4-6, 2006 Doubletree Lloyd Center Portland, Oregon





HOSTED BY: U.S. FISH & WILDLIFE SERVICE